CLAIMS

1. A device for examining human and animal body cavities, the device comprising

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- a catheter (1) with a proximal end (A) and a closed distal end (B) for inserting into the human or animal body cavity, the catheter having a lumen extending from the proximal end into the catheter,
- a signal generator (2) for generating an excitation signal,
 - a transmitting transducer (3) coupled to receive the excitation signal and arranged to transmit, in response to the excitation signal, a corresponding acoustic signal into the lumen of the catheter.

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- a receiving transducer (5) arranged to receive reflections of the acoustic signal from the lumen of the catheter,

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- a pressure transducer (42) sensitive to low frequencies and arranged to sense, when inserted into the body cavity, the pressure in the lumen of the catheter and outputting a signal representing low-frequency pressure variations, and

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- a signal processing device (4, 6) for receiving and analysing the output signals from the receiving transducer (5) and the pressure transducer (42).
- 2. A device according to claim 1 wherein the excitation signal comprises an impulse signal of duration short enough to make the corresponding reflected signal distinguishable from the excitation signal.

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- 3. A device according to claim 1, where the pressure transducer (42) is sensitive to frequencies up to at least 10 Hz, preferably up to at least 100 Hz.
- 4. A method for obtaining dynamic data of the conditions in a human or ani-mal body cavity, the method comprising
 - transmitting an acoustic impulse signal into the body cavity,
 - receiving reflections of the acoustic impulse signal from the body cavity,
 - obtaining data of low frequency pressure changes in the body cavity, and
 - analysing the received reflections and the data of low frequency pressure changes to obtain information on the body cavity.
 - 5. A method according to claim 4 comprising transmitting the data obtained to a signal processing device for simultaneous processing.
- 6. A method according to claim 4, wherein the analysis of the received reflec tions and of the data of low frequency pressure changes are used to provide corresponding area and pressure representations.